

Table 3 Chemicals: Comparison of NR 445 Threshold Alternatives

(Sorted By decreasing difference between 10⁵ and 10⁶ threshold levels)

1	2	3	4	5	6	7
Pollutant Name (names in red are synonyms)	CAS #	10 ⁴ risk level (lbs/yr)	10 ⁵ risk level (lbs/yr)	Current Table 3 (lbs/yr)	Difference between current & 10 ⁵ (lbs/yr)	Difference between 10 ⁵ and 10 ⁶ (lbs/yr)
Butylated hydroxyanisole (BHA)	25013-16-5	3694	36943			(33,249)
Dichloromethane (Methylene chloride)	75-09-2	448	4480	255,354	(250,874)	(4,032)
Methylene chloride (Dichloromethane)	75-09-2	448	4480	255,354	(250,874)	(4,032)
Phenacetin	62-44-2	334	3342			(3,008)
1-Chloro-2,3-epoxypropane (Epichlorohydrin)	106-89-8	175	1755	300	1,455	(1,579)
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106-89-8	175	1755	300	1,455	(1,579)
Disperse Blue 1	2475-45-8	162	1620			(1,458)
Nitrotriacetic acid	139-13-9	140	1404			(1,263)
Acetaldehyde	75-07-0	96	957	131,312	(130,355)	(861)
Trichlorophenol, 2,4,6-	88-06-2	68	679			(611)
2,4-Diaminoanisole sulfate	39156-41-7	57	569	250	319	(512)
Propylene oxide	75-56-9	57	569	250	319	(512)
Hexachloroethane	67-72-1	53	526			(474)
4-Chloro-1,2-benzenediamine (4-Chloro-o-phenylenediamine)	95-83-0	46	458			(412)
4-Chloro-o-phenylene diamine (4-Chloro-1,2-benzenediamine)	95-83-0	46	458			(412)
Perchloroethylene (Tetrachloroethylene)	127-18-4	36	357	244,404	(244,047)	(321)
Tetrachloroethylene (Perchloroethylene)	127-18-4	36	357	244,404	(244,047)	(321)
p-Nitrosodiphenylamine	156-10-5	33	334	250	84	(301)
1,4-Diethylene oxide (1,4-Dioxane)	123-91-1	27	273	250	23	(246)
1,4-Dioxane (1,4-Diethylene oxide)	123-91-1	27	273	250	23	(246)
Benzene	71-43-2	27	270	300	(30)	(243)
2-Aminoanthraquinone	117-79-3	22	224	250	(26)	(202)
p-Dichlorobenzene (1,4-Dichlorobenzene)	106-46-7	19	191	136,656	(136,465)	(172)
Lead Phosphate	7446-27-7	18	175			(158)
Formaldehyde	50-00-0	16	162	250	(88)	(146)
Dimethylvinyl chloride	513-37-1	16	162			(146)
Ethylene thiourea	96-45-7	16	162	250	(88)	(146)
2,4,7,6-Toluene diisocyanate mixture (TDI), (mixtures & isomers)	584-84-9	15	147	30	117	(133)
Carbon tetrachloride	56-23-5	14	140	25	115	(126)
1,3-Dichloropropene	542-75-6	13	132	3,662	(3,530)	(118)
Thiourea	62-56-6	10	100	250	(150)	(90)
1,8-Dihydroxyanthraquinone (Dantron)	117-10-2	9.6	96			(86)
Dantron (1,8-Dihydroxyanthraquinone)	117-10-2	9.6	96			(86)
Nitrofen	1836-75-5	9.2	92			(82)
Chloroform	67-66-3	9.2	92	250	(158)	(82)
Chlorinated paraffins (C12; 60% chlorine)	108171-26-2	8.4	84			(76)
1,2-Dichloroethane (Ethylene dichloride; EDC)	107-06-2	8.1	81	25	56	(73)
Ethylene dichloride (EDC) (1,2-Dichloroethane)	107-06-2	8.1	81	25	56	(73)
Chlorendic acid	115-28-6	8.1	81			(73)
Methyl methanesulfonate	66-27-3	7.5	75			(68)
Bromodichloromethane	75-27-4	5.7	57			(51)
Anisidine and o-anisidine hydrochloride (mixtures and isomers)	29191-52-4	5.3	53	250	(197)	(47)
p-Cresidine	120-71-8	4.9	49	250	(201)	(44)
Phenazopyridine and phenazopyridine hydrochloride	94-78-0	4.3	43	250	(207)	(39)
o-Toluidine and mixed isomers	95-53-4	4.1	41	25	16	(37)
Sulfallate	95-06-7	3.9	39			(35)
Safrole	94-59-7	3.3	33			(30)
Acrylonitrile	107-13-1	3.1	31	25	6	(28)
p-Chloro-o-toluidene and p-Chloro-o-toluidene hydrochloride	95-69-2	2.7	27			(25)
C.I. Basic Red 9 monohydrochloride	569-61-9	2.7	27			(24)
Vinyl chloride	75-01-4	2.7	27	300	(273)	(24)
Lead Acetate	301-04-2	2.6	26			(24)
Ethylene oxide	75-21-8	2.4	24	25	(1)	(22)
DDT (Dichlorodiphenyltrichloroethane)	50-29-3	2.2	22			(20)
Dichlorodiphenyltrichloroethane (DDT)	50-29-3	2.2	22			(20)
Indeno(1,2,3-cd)pyrene	193-39-5	1.9	19	250	(231)	(17)
Dibenz(a,j)acridine	224-42-0	1.9	19	250	(231)	(17)
Dibenz(a,h)acridine	226-36-8	1.9	19	250	(231)	(17)
1-Nitropyrene	5522-43-0	1.9	19			(17)
4-Nitropyrene	57835-92-4	1.9	19			(17)
Cyclophosphamide	50-18-0	1.2	12	25	(13)	(11)
1,2-Dibromoethane (EDB) (Ethylene dibromide)	106-93-4	0.96	9.6	250	(240)	(9)
Ethylene dibromide (EDB) (1,2-Dibromoethane)	106-93-4	0.96	9.6	250	(240)	(9)
1,2-Diphenylhydrazine (Hydrazobenzene)	122-66-7	0.96	9.6	250	(240)	(9)
Hydrazobenzene (1,2-Diphenyl hydrazine)	122-66-7	0.96	9.6	250	(240)	(9)
Nickel carbonyl, as Ni	13463-39-3	0.81	8.1			(7)
Nickel and compounds	7440-02-0	0.81	8.1	250	(242)	(7)
Amitrole	61-82-5	0.78	7.8	145	(137)	(7)
1,3-Butadiene	106-99-0	0.75	7.5	36,441	(36,433)	(7)
Propylthiouracil	51-52-5	0.73	7.3	250	(243)	(7)
Ethyl carbamate (Urethane)	51-79-6	0.73	7.3	250	(243)	(7)
Urethane (Ethyl carbamate)	51-79-6	0.73	7.3	250	(243)	(7)
Hexachlorocyclohexane and isomers (Lindane and isomers)	58-89-9	0.68	6.8	25	(18)	(6)
Lindane and other hexachlorocyclohexane isomers	58-89-9	0.68	6.8	25	(18)	(6)
Chlorinated camphene (Toxaphene)	8001-35-2	0.66	6.6	357	(350)	(6)
Toxaphene (Chlorinated camphene)	8001-35-2	0.66	6.6	357	(350)	(6)
3,3'-Dichlorobenzidine	91-94-1	0.62	6.2	250	(244)	(6)
4,4'-Methylene bis(2-chloroaniline) (MOCA)	101-14-4	0.49	4.9	250	(245)	(4)
4,4'-Methylenedianiline (and dihydrochloride)	101-77-9	0.46	4.6	250	(245)	(4)
Hexachlorobenzene (HCB)	118-74-1	0.46	4.6	25	(20)	(4)
Nickel subsulfide	12035-72-2	0.44	4.4	25	(21)	(4)
Diglycidyl resorcinol ether	101-90-6	0.43	4.3			(4)
Azathioprine	446-86-6	0.41	4.1	25	(21)	(4)
Chlorodiphenyls (Polychlorinated biphenyls) (PCBs)	1336-36-3	0.37	3.7	0.10	4	(3)
Polychlorinated biphenyls (PCBs; Chlorodiphenyls; Arochlor)	1336-36-3	0.37	3.7	0.10	4	(3)
N-Nitrosopyrrolidine	930-55-2	0.35	3.5	250	(247)	(3)
Coke oven emissions		0.34	3.4	25	(22)	(3)
Tris(2,3-dibromopropyl phosphate)	126-72-7	0.32	3.2			(3)
1,3-Propane sultone	1120-71-4	0.31	3.1	250	(247)	(3)
Phenoxybenzamine hydrochloride	63-92-3	0.27	2.7			(2)
N-Nitrosodiethanolamine	1116-54-7	0.26	2.6	250	(247)	(2)
Dibenzof(a,e)pyrene	192-65-4	0.19	1.9			(2)
7H-Dibenzo(c,g)carbazole	194-59-2	0.19	1.9	250	(248)	(2)
5-Methyl chrysene	3697-24-3	0.19	1.9			(2)
1,8-Dinitropyrene	42397-65-9	0.19	1.9			(2)
Benzo(a)pyrene	50-32-8	0.19	1.9	250	(248)	(2)
2,4-Diaminotoluene (Toluene-2,4-diamine)	95-80-7	0.19	1.9	250	(248)	(2)
Toluene-2,4-diamine (2,4-Diaminotoluene)	95-80-7	0.19	1.9	250	(248)	(2)
2-Aminoazotoluene (o-Aminoazotoluene)	97-56-3	0.19	1.9			(2)
o-Aminoazotoluene (2-Aminoazotoluene)	97-56-3	0.19	1.9			(2)
Dibenz(a,h)anthracene	53-70-3	0.18	1.8	250	(248)	(2)
4-Dimethylaminoazobenzene	60-11-7	0.16	1.6	250	(248)	(1)
Acrylamide	79-06-1	0.16	1.6	210	(208)	(1)

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N-Nitrosodi-n-butylamine	924-16-3	0.13	1.3	250	(249)	(1)
Thioacetamide	62-55-5	0.12	1.2			(1)
Cadmium and cadmium compounds, as Cd	7440-43-9	0.12	1.2	25	(24)	(1)
N-Nitrosomorpholine	59-89-2	0.11	1.1	250	(249)	(1)
N-Nitrosodi-n-propylamine	621-64-7	0.11	1.1	250	(249)	(1)
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.11	1.1	250	(249)	(1)
DBCP (1,2-Dibromo-3-chloropropane)	96-12-8	0.11	1.1	250	(249)	(1)
Direct black 38 (Benzidine-based dye)	1937-37-7	0.10	1.0			(1)
Direct blue 6 (Benzidine-based dye)	2602-46-2	0.10	1.0			(1)
N-Methyl-N-nitro-N-nitrosoguanidine (MNNG)	70-25-7	0.088	0.88			(1)
Beryllium and beryllium compounds, as Be	7440-41-7	0.088	0.88	25	(24)	(1)
N-Nitrosopiperidine	100-75-4	0.078	0.78	250	(249)	(1)
Reserpine	50-55-5	0.068	0.68	250	(249)	(1)
Thiotepea (Tris(1-aziridinyl)phosphine sulfide)	52-24-4	0.062	0.62	250	(249)	(1)
Tris(1-aziridinyl)phosphine sulfide (Thiotepea)	52-24-4	0.062	0.62	250	(249)	(1)
Dimethyl carbamoyl chloride	79-44-7	0.057	0.57	250	(249)	(1)
beta-Propiolactone	57-57-8	0.053	0.53	250	(249)	(0)
Procarbazine and procarbazine hydrochloride	671-16-9	0.053	0.53	250	(249)	(0)
Arsenic and inorganic compounds, as As	7440-38-2	0.049	0.49	25	(25)	(0)
Chlordecone (Kepone)	143-50-0	0.046	0.46			(0)
Kepone (Chlordecone)	143-50-0	0.046	0.46			(0)
Hydrazine and hydrazine sulfate	302-01-2	0.043	0.43	250	(250)	(0)
Mirex	2385-85-5	0.041	0.41			(0)
4-Aminobiphenyl	92-67-1	0.035	0.35	25	(25)	(0)
N-Nitroso-N-ethylurea	759-73-9	0.027	0.27	250	(250)	(0)
Bromodiphenyls (Polybrominated biphenyls (PBBs))	59536-65-1	0.024	0.24			(0)
Polybrominated biphenyls (PBBs; Bromodiphenyls)	59536-65-1	0.024	0.24			(0)
Dibenzof(a,h)pyrene	189-55-9	0.019	0.19	250	(250)	(0)
Dibenzof(a,h)pyrene	189-64-0	0.019	0.19	250	(250)	(0)
Dibenzof(a,l)pyrene	191-30-0	0.019	0.19			(0)
1,6-Dinitropyrene	42397-64-8	0.019	0.19			(0)
Estradiol (Estradiol)	50-28-2	0.019	0.19	250	(250)	(0)
Oestradiol (Estradiol)	50-28-2	0.019	0.19	250	(250)	(0)
6-Nitrochrysene	7496-02-8	0.019	0.19			(0)
Chromyl chloride, as Cr	14977-61-8	0.020	0.18	0.100	0.0800	(0)
tert-Butyl chromate, as Cr	1189-85-1	0.018	0.18	0.100	0.0755	(0)
Chromium (VI): Chromic acid mists and dissolved Cr (VI) aerosols	7440-47-3	0.018	0.18	36	(36)	(0)
Chromium (VI): compounds and particulates	7440-47-3	0.018	0.18	36	(36)	(0)
Dacarbazine	4342-03-4	0.015	0.15	250	(250)	(0)
N-Nitrosodimethylamine	62-75-9	0.015	0.15	250	(250)	(0)
Streptozotocin	18883-66-4	0.0068	0.068	250	(250)	(0)
N-Nitroso-N-methylurea	684-93-5	0.0062	0.062	250	(250)	(0)
Melphalan	148-82-3	0.0057	0.057	25	(25)	(0)
N-Nitrosodiethylamine	55-18-5	0.0049	0.049	250	(250)	(0)
Benzidine	92-87-5	0.0031	0.031	2	(2)	(0)
Chlorozotocin	54749-90-5	0.0031	0.031			(0)
Diethylstilbestrol (DES)	56-53-1	0.0021	0.021	25	(25)	(0)
Chlorambucil	305-03-3	0.0016	0.016	25	(25)	(0)
Estrogens, conjugated		10	10			0
Radon	10043-92-2	10	10			0
2,4-Diaminophenyl ether (4,4'-Oxydianiline)	101-80-4	10	10			0
4,4'-Oxydianiline (2,4-Diaminophenyl ether)	101-80-4	10	10			0
Vinyl cyclohexene dioxide (4-vinyl-1-cyclohexene diepoxide)	106-87-6	10	10	13,140	(13,130)	0
Chloromethyl methyl ether (CMME)	107-30-2	10	10	0.10	10	0
Furan	110-00-9	10	10			0
Bis(2-ethyl hexyl) phthalate (Diethyl hexyl phthalate)	117-81-7	10	10	250	(240)	0
Di(2-ethylhexyl)phthalate (Bis(2-ethyl hexyl) phthalate) (DEHP) (Di)	117-81-7	10	10	250	(240)	0
3,3'-Dimethoxybenzidine (o-Dianisidine)	119-90-4	10	10	250	(240)	0
o-Dianisidine (3,3'-Dimethoxybenzidine)	119-90-4	10	10	250	(240)	0
3,3'-Dimethylbenzidine (o-Tolidine)	119-93-7	10	10	250	(240)	0
o-Tolidine (3,3'-Dimethylbenzidine)	119-93-7	10	10	250	(240)	0
Saccharin	128-44-9	10	10			0
1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU)	13010-47-4	10	10	250	(240)	0
N-Nitrososarcosine	13256-22-9	10	10	250	(240)	0
Asbestos	1332-21-4	10	10	25	(15)	0
1-Chloroethyl-3-(4-methylcyclohexyl)-1-nitrosourea (MeCCNU)	13909-09-6	10	10			0
Aflatoxins	1402-68-2	10	10	25	(15)	0
Ethyl acrylate	140-88-5	10	10	14,629	(14,619)	0
Diepoxybutane	1464-53-5	10	10			0
Silica-Crystalline (respirable size)	14808-60-7	10	10			0
Bischloroethyl nitrosourea	154-93-8	10	10	250	(240)	0
Cisplatin	15663-27-1	10	10			0
N'-Nitrosomonocotine	16543-55-8	10	10	250	(240)	0
2,3,7,8-Tetrachlorodibenzo-p-dioxin (Dioxin; 2,3,7,8-TCDD), as dic	1746-01-6	0.0001	0.0001	0.0001	0	0
Dioxin (2,3,7,8-Tetrachlorodibenzo-p-dioxin)	1746-01-6	0.0001	0.0001	0.0001	0	0
TCDD (2,3,7,8-Tetrachlorodibenzo-p-dioxin)	1746-01-6	0.0001	0.0001	0.0001	0	0
3,3'-Dimethoxybenzidine hydrochloride (o-Dianisidine hydrochlorid	20325-40-0	10	10			0
o-Dianisidine hydrochloride (3,3'-Dimethoxybenzidine hydrochlorid	20325-40-0	10	10			0
Benzo(j)fluoranthene	205-82-3	10	10			0
Benzo(b)fluoranthene	205-99-2	10	10	250	(240)	0
Benzo(k)fluoranthene	207-08-9	10	10			0
Adriamycin	23214-92-8	10	10	250	(240)	0
Methoxsalen (8-Methoxypsoralen)	298-81-7	10	10			0
Ochratoxin A	303-47-9	10	10			0
Azactidine, 5-	320-67-2	10	10			0
Oxymetholone	434-07-1	10	10	250	(240)	0
Metronidazole	443-48-1	10	10			0
N-Nitrosomethylvinylamine	4549-40-0	10	10	250	(240)	0
Chlornaphazine (N,N-Bis (2-chloroethyl)-2-naphthylamine)	494-03-1	10	10	25	(15)	0
N,N-Bis (2-chloroethyl)-2-naphthylamine (Chlornaphazine)	494-03-1	10	10	25	(15)	0
Mustard gas	505-60-2	10	10	25	(15)	0
Tetranitromethane	509-14-8	10	10			0
Nitrogen mustards	51-75-2	10	10	250	(240)	0
Estrogens, not conjugated: Estrone	53-16-7	10	10			0
Bis(chloromethyl) ether(BCME) and technical grade	542-88-1	10	10	0.10	10	0
1,4-Butanediol dimethanesulphonate (Myleran)	55-98-1	10	10	25	(15)	0
Myleran (1,4-Butanediol dimethanesulphonate)	55-98-1	10	10	25	(15)	0
Benz(a)anthracene	56-55-3	10	10	250	(240)	0
1,1-Dimethylhydrazine	57-14-7	10	10	250	(240)	0
Phenytol and sodium salt of phenytol	57-41-0	10	10	250	(240)	0
Estrogens, not conjugated: Ethinylestradiol	57-63-6	10	10			0
Cyclosporin A (Cyclosporine, Ciclosporin)	59865-13-3	10	10			0
Ethyl methanesulphonate	62-50-0	10	10			0

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4-(N-Nitrosomethylamino)-1-(3-pyridyl)-1-butanone, 4- (NNK)	64091-91-4	10	10			0
Diethyl sulfate	64-67-5	10	10	25	(15)	0
Erionite (Zeolites)	66733-21-9	10	10			0
Zeolites (Erionite)	66733-21-9	10	10			0
Hexamethyl phosphoramide	680-31-9	10	10	250	(240)	0
Mestranol	72-33-3	10	10	250	(240)	0
Iodomethane (Methyl iodide)	74-88-4	10	10	250	(240)	0
Methyl iodide (Iodomethane)	74-88-4	10	10	250	(240)	0
2-Methylaziridine (Propylenimine)	75-55-8	10	10	250	(240)	0
Propylenimine (2-Methyl aziridine)	75-55-8	10	10	250	(240)	0
Dimethyl sulfate	77-78-1	10	10	25	(15)	0
2-Nitropropane	79-46-9	10	10	250	(240)	0
Iron dextran complex	9004-66-4	10	10	250	(240)	0
o-Nitroanisole	91-23-6	10	10			0
2-Naphthylamine	91-59-8	10	10	25	(15)	0
1,2,3-Trichloropropane	96-18-4	10	10	219,000	(218,990)	0
Benzotrichloride	98-07-7	10	10	250	(240)	0
Ceramic Fibers (respirable size)		10	10			0
Glasswool, respirable size		10	10			0
Polycyclic organic matter (POM)	no CAS	NA	NA	250		#VALUE!